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December 3, 2013

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Colonel Kim C. Cotton
District Engineer, Los Angeles District
U.S. Army Corps of Engineers
P.O. Box 7592711
Los Angeles, CA 90075

Re: EPA Evaluation of Rosemont Mine Compensatory Mitigation

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Dear Colonel Cotton:

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Rosemont Copper Company (Rosemont) is a copper mine in southern California. Rosemont is a copper mining operation doing so, we intend to ensure that the Rosemont take as corporate and those actions required for Rosemont to meet environmental standards under the various environmental rules, regulations, and other applicable laws and regulations.

Attached to this letter are Rosemont's initial engineering evaluation by the Environmental Protection Agency (EPA) of the Rosemont Aquatic System (RAS) and proposed WA Compensatory Mitigation for the Rosemont Mine in Maricopa County, Arizona. EPA evaluation that was sent to you on November 7, 2013. The EPA evaluation concerns the 404 permit that Rosemont is applying for with the proposed copper mining and processing in Maricopa County. EPA evaluation concludes that Rosemont's "proposed mitigation [is] grossly inadequate to protect for Project EPA evaluation, as the Rosemont mitigation is based on a misapplication of the 404(b)(1) Guidelines (the Guidelines) in that they relate "secondary effects" of Rosemont's proposed discharge to which mitigation is required; (2) the mischaracterization of many of the proposed impacts; and (3) the mischaracterization of the mitigation proposal. In error, when the effects are characterized by Rosemont as the mitigation is based on Rosemont has developed a proposal when finalized, it will meet the requirements for compensatory for the unavoidable impacts, which will be the Rosemont States

The discussion of the EPA Evaluation is provided into several sections:

- I. Introduction;
- II. A discussion of the secondary impacts of the discharge;
- III. A discussion of the EPA mischaracterization of impacts including those are not part of the 404 regulatory process;
- IV. Rosemont's 404 mitigation package and proposal;
- V. Conclusion.

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II. THE EVALUATION INCORRECTLY IDENTIFIES THE IMPACTS FOR WHICH COMPENSATORY MITIGATION IS REQUIRED

As discussed in the Rosemont project impact assessment, approximately 40 acres of ephemeral washes are affected. Most of these direct impacts will result from the tailings facilities and the Band Wasp, which is a relatively flat, low gradient ephemeral wash. The impacts of the Band Wasp are limited to the loss of utilities, and associated infrastructure. The five springs to be directly impacted by the Project (Rosemont Sping) occur in its natural state (with flows of less than 100 gpm) and even modest riparian vegetation. Of the remaining features identified (Unnamed Spring), the seeps that are likely to be affected are only a few of the vegetation. The remaining two (Bee Spring) and (Mudflat) are water sources for livestock. In addition, the Project will result in loss of downstream surface flows to the Barren area, and any algorithm developed for the Project to estimate downstream flows will be an additional impact. The Project represents a significant loss that gradually diminishes downstream. The Project impacts are simply the damage areas that will remain.

The EPA Action finds that Rosemont's proposed discharge is not compensatory because it fails to compensate for all of the "secondary effects" characterized by the region's wetlands, which are the primary impact for the EPA Evaluation. The EPA Action focuses, in particular, on the "secondary effects" that have groundwater and the bedrock formations, and the discharge of those could affect surface flows. Some of the "secondary effects" are too broadly assumed to be the "secondary effects" of the proposed discharge of States are the potential cumulative and residual impacts from the Project as a whole, which are not addressed in the "secondary effects" Guidelines.

"Secondary effects" are defined by the Guidelines as the effects of associated with discharge of dredged or fill materials, but do not include the dredged or fill material." 40 CFR 230.11(h)(1). The A corrective discharge is obviously not the discharge of the discharge of those effects. Without such a determination, it is impossible to set mitigation is commensurate with the amount and type of impact discharge. 40 CFR 230.11(h)(1) appears to ignore the fact that the discharge explain its mitigation how the impact of the discharge is not a primary mitigation is required within the Guidelines.

To insure that the concept of "secondary effects" is not applied to those authorized to regulate those affected by the discharge, the specific examples of discharge effects are first example is "fluctuating water levels impoundment and downstream associated with the operation of a dam" "septic tank leaching and surface runoff from residential or commercial

2. EPA Volume 5, Appendix A U.S. Army Corps of Engineers' Section 404 (page 38)

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example 켈 04 is 켈 04 “leachate 켈 04 and 켈 04 runoff 켈 04 from 켈 04 a 켈 04 sanitary 켈 04 landfill 켈 04 located 켈 04 in these 켈 04 examples 켈 04 that 켈 04 to 켈 04 qualify 켈 04 as 켈 04 a 켈 04 “secondary 켈 04 effect” 켈 04 of 켈 04 a result 켈 04 of 켈 04 water 켈 04 moving 켈 04 across 켈 04 an 켈 04 impounded 켈 04 high 켈 04 water 켈 04 table 켈 04 or 켈 04 feature 켈 04 been 켈 04 created 켈 04 by 켈 04 the 켈 04 discharge. 켈 04 켈 04 In 켈 04 the 켈 04 first 켈 04 example, 켈 04 the 켈 04 discharge 켈 04 affects 켈 04 the 켈 04 water 켈 04 levels 켈 04 both 켈 04 in 켈 04 the 켈 04 impoundment 켈 04 and 켈 04 downstream; 켈 04 discharge 켈 04 is 켈 04 dry 켈 04 land 켈 04 on 켈 04 which 켈 04 a 켈 04 residential 켈 04 or 켈 04 commercial 켈 04 development 켈 04 on 켈 04 the 켈 04 land 켈 04 then 켈 04 results 켈 04 in 켈 04 leaching 켈 04 into 켈 04 the 켈 04 ground placed 켈 04 in 켈 04 the 켈 04 fill 켈 04 and 켈 04 surface 켈 04 runoff 켈 04 the 켈 04 discharge 켈 04 creates 켈 04 a 켈 04 surface landfill, 켈 04 and 켈 04 the 켈 04 storm 켈 04 water 켈 04 that 켈 04 falls 켈 04 on 켈 04 the 켈 04 landfill 켈 04 then 켈 04 passes 켈 04 through 켈 04 the 켈 04 landfill 켈 04 and 켈 04 runoff 켈 04 from 켈 04 its 켈 04 surface. 켈 04 켈 04

So 켈 04 the 켈 04 understanding 켈 04 about 켈 04 the 켈 04 “secondary 켈 04 effects” 켈 04 that 켈 04 followed 켈 04 by 켈 04 an 켈 04 explicit 켈 04 statement 켈 04 that 켈 04 “activities 켈 04 to 켈 04 be 켈 04 conducted 켈 04 of 켈 04 dredged 켈 04 or 켈 04 fill 켈 04 material 켈 04 in 켈 04 any 켈 04 water 켈 04 body 쮸 secondary 쮸 impacts 쮸 state 쮸 within 쮸 waters 쮸 which 쮸 be 쮸 considered 쮸 in 쮸 evaluating 쮸 the 쮸 impact 쮸 of 쮸 creating 쮸 statement 쮸 is 쮸 specific 쮸 to 쮸 activities 쮸 conducted 쮸 on 쮸 a 쮸 structure 쮸 or 쮸 feature 쮸 significantly, 쮸 the 쮸 Guidelines 쮸 do 쮸 not 쮸 state 쮸 that 쮸 activities 쮸 subject 쮸 to 쮸 section 쮸 40 jurisdiction 쮸 that 쮸 may 쮸 have 쮸 been 쮸 facilitated 쮸 by 쮸 activities 쮸 that 쮸 take 쮸 place 쮸 elsewhere 쮸 “but 쮸 for” 쮸 the 쮸 “fast 쮸 land

Unfortunately, 쮸 activities 쮸 not 쮸 subject 쮸 to 쮸 40 쮸 jurisdiction 쮸 when 쮸 are 쮸 conducted 쮸 in 쮸 its 쮸 jurisdiction. 쮸 쮸 “secondary 쮸 effects” 쮸 of 쮸 Rosemont’s 쮸 discharge 쮸 the 쮸 effects 쮸 on 쮸 aquatic 쮸 resources 쮸 and 쮸 mineral 쮸 groundwater 쮸 levels resulting 쮸 from 쮸 project 쮸 activities 쮸 anywhere 쮸 within 쮸 the 쮸 project 쮸 area, 쮸 rather 쮸 effects 쮸 of 쮸 water 쮸 activities 쮸 conducted 쮸 on 쮸 the 쮸 “fast 쮸 land” 쮸 created 쮸 the 쮸 effects 쮸 in 쮸 “waters 쮸 of 쮸 the 쮸 United 쮸 States 쮸 and 쮸 the 쮸 Wetlands 쮸 쮸 simply 쮸 because 쮸 Rosemont’s 쮸 proposed 쮸 discharge 쮸 is 쮸 part 쮸 that 쮸 will 쮸 be 쮸 facilitated 쮸 by 쮸 primary 쮸 impacts 쮸 that 쮸 have 쮸 on 쮸 aquatic 쮸 resources 쮸 are 쮸 “secondary 쮸 effects” 쮸 of 쮸 the 쮸 discharge 쮸 and 쮸 the 쮸 overreaching 쮸 contrary 쮸 to 쮸 the 쮸 Guidelines, 쮸 and 쮸 쮸 explicit 쮸 guidance 쮸

In 쮸 describing 쮸 “secondary 쮸 effects” 쮸 that 쮸 it 쮸 claims 쮸 to 쮸 be 쮸 subject 쮸 to 쮸 the 쮸 repeated 쮸 references 쮸 “project 쮸 impacts” 쮸 or 쮸 “secondary 쮸 effects” 쮸, 쮸 쮸 5, 쮸 8, 쮸 an example. 쮸 쮸 Wetlands 쮸 Office 쮸 does 쮸 not 쮸 “secondary 쮸 effects” 쮸 of 쮸 쮸. 쮸 Additionally 쮸 쮸 page 쮸 of 쮸 쮸 “secondary 쮸 effects” 쮸 쮸 쮸 “project 쮸 does 쮸 not 쮸 comply 쮸 with 쮸 ... 쮸 the 쮸 Guidelines 쮸. 쮸 쮸 is 쮸 not 쮸 required 쮸 to 쮸 comply 쮸 with 쮸 the 쮸 permit 쮸 conditions; 쮸 it 쮸 is 쮸 “secondary 쮸 effects” 쮸 of 쮸 the 쮸 project 쮸 Guidelines 쮸 plainly 쮸 fails 쮸 to 쮸 define 쮸 that 쮸 distinction, 쮸 it 쮸 to 쮸 disregard 쮸 its 쮸 “secondary 쮸 effects” 쮸 of 쮸 the 쮸 project 쮸.

The 쮸 “secondary 쮸 effects” 쮸 of 쮸 the 쮸 project 쮸 are 쮸 not 쮸 subject 쮸 to 쮸 the 쮸 illustrative 쮸 examples 쮸 of 쮸 such 쮸 effects 쮸 that 쮸 are 쮸 “secondary 쮸 effects” 쮸 of 쮸 the 쮸 project 쮸 discharge 쮸 with 쮸 guidance 쮸 provided 쮸 issue 쮸 of 쮸 “secondary 쮸 effects” 쮸 by 쮸 EPA’s 쮸 General 쮸 Counsel. 쮸 쮸 The 쮸 guidance 쮸 response 쮸 to 쮸 a 쮸 question 쮸 that 쮸 was 쮸 asked 쮸 by 쮸 the 쮸 Assistant 쮸 Administrator 쮸 preparing 쮸 the 쮸 Guidelines. 쮸 쮸 The 쮸 Assistant 쮸 Administrator 쮸 asked, 쮸 “Must 쮸 it 쮸 impacts?” 쮸 쮸 In 쮸 response, 쮸 the 쮸 General 쮸 Counsel 쮸 stated:

By 쮸 “secondary 쮸 effects,” 쮸 쮸 am 쮸 assuming 쮸 that 쮸 you 쮸 mean 쮸 reasonably 쮸

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loss, 쉼 conversion 쉼 and 쉼 functional 쉼 degradation 쉼 of 쉼 aquatic 쉼 and 쉼 terrestrial 쉼 acres 쉼 See 쉼 Evaluation, 쉼 result 쉼 of 쉼 this 쉼 on 쉼 the 쉼 the 쉼 limits 쉼 of 쉼 404 쉼 Authority, 쉼 valuation 쉼 stating 쉼 that 쉼 Rosemont's 쉼 mitigation 쉼 inadequate 쉼 in 쉼 쉼

쉼

III. THE EVALUATION CHARACTERIZES MANY OF THE IMPACTS OF THE PROJECT

Even 쉼 Wetlands 쉼 had 쉼 properly 쉼 identified 쉼 the 쉼 "secondary 쉼 effects" 쉼 of 쉼 mischaracterized 쉼 like 쉼 severity 쉼 and 쉼 extent 쉼 of 쉼 mining 쉼 on 쉼 which 쉼 do 쉼 even 쉼 require 쉼 404 쉼 mitigation 쉼 (i.e., 쉼 groundwater 쉼); 쉼 three 쉼 types: 쉼 what 쉼 it 쉼 terms 쉼 "Indirect/Secondary 쉼 Impacts" 쉼 of 쉼 쉼 that 쉼 In 쉼 order 쉼 of 쉼 their 쉼 significance 쉼 the 쉼 Downstream 쉼 of 쉼 the 쉼 Mine," 쉼 and 쉼 "Lost 쉼 Functions 쉼 A 쉼 to 쉼 Downstream 쉼 mischaracterizes 쉼 the 쉼 effects 쉼 of 쉼 groundwater 쉼 resources 쉼 (which 쉼 are 쉼 not 쉼 a of 쉼 discharge 쉼 in 쉼 any 쉼 event); 쉼 (b) 쉼 mischaracterizes 쉼 effects 쉼 on 쉼 downgr are 쉼 being 쉼 accounted 쉼 for 쉼 and 쉼 addressed 쉼 through 쉼 compensatory 쉼 mitigation); that 쉼 loss 쉼 of 쉼 waters 쉼 upgradient 쉼 of 쉼 쉼 that 쉼 being 쉼 addressed 쉼 through 쉼 compensatory 쉼 mitigation) of 쉼 impact 쉼 discussed 쉼

Groundwater Drawdown

The 쉼 reveals 쉼 that 쉼 the 쉼 groundwater 쉼 levels 쉼 in 쉼 the 쉼 regional 쉼 underlying 쉼 the 쉼 Project 쉼 active 쉼 mining 쉼 operations 쉼 A 쉼 claims 쉼 that 쉼 this 쉼 groundwater 쉼 drawdown 쉼 will 쉼 result 쉼 in 쉼

"...dramatic 쉼 and 쉼 persistent 쉼 changes 쉼 in 쉼 and 쉼 regimes 쉼 driven 쉼 groundwater 쉼 hydrology," 쉼 part 쉼 and 쉼 the 쉼 lower 쉼 reaches 쉼 Creek 쉼 that 쉼 it 쉼 "will 쉼 reduce 쉼 streamflows, 쉼 increase 쉼 water 쉼 temperatures spawning, 쉼 rearing 쉼 and 쉼 emigrate 쉼 other 쉼 critical 쉼 life 쉼 history 쉼 require and 쉼 wildlife 쉼 resources," 쉼

and 쉼 쉼

"...will 쉼 add 쉼 to 쉼 a 쉼 baseline 쉼 trend 쉼 of 쉼 decreasing 쉼 groundwater, 쉼 cau water 쉼 in 쉼 streams 쉼 and 쉼 wetlands 쉼 along 쉼 Empire 쉼 Gulch, 쉼 Mattie 쉼 Car Cienega 쉼 Creek 쉼 with 쉼 potential 쉼 adverse 쉼 impacts 쉼 to 쉼 over 쉼 30 쉼 seasc threatened 쉼 and 쉼 endangered 쉼 aquatic 쉼 habitat 쉼 dependent 쉼 plants, 쉼 fish 쉼

EPA 쉼 Evaluation 쉼 쉼 however, 쉼 this 쉼 characterization 쉼 considerably 쉼 exaggerates 쉼 the 쉼 potential 쉼 of 쉼 and 쉼 cannot 쉼 be 쉼 reconciled 쉼 with 쉼 the 쉼 conclusions 쉼 of 쉼 the 쉼 report 쉼 that

- 1) "[w]ith 쉼 respect 쉼 to 쉼 drawdown 쉼 in 쉼 the 쉼 region, 쉼 the 쉼 available 쉼 suggests 쉼 that 쉼 it 쉼 is 쉼 unlikely 쉼 that 쉼 flows 쉼 in 쉼 the 쉼 region 쉼 that 쉼 be 쉼 impacted 쉼 by 쉼 the 쉼 mine 쉼 site

For 쉼 perspective 쉼 on 쉼 the 쉼 statement, 쉼 Empire 쉼 Gulch 쉼 is 쉼 approximately 쉼 5 쉼 miles 쉼 Mattie 쉼 Canyon 쉼 is 쉼 approximately 쉼 10 쉼 miles 쉼 due 쉼 east 쉼 of 쉼 the 쉼 Project 쉼 site, 쉼 Project 쉼 site, 쉼 and 쉼 Cienega 쉼 Creek 쉼 are 쉼 located 쉼 and 쉼 the 쉼 Project 쉼 site. 쉼 The 쉼 watershed Project 쉼 site 쉼 drains 쉼 from 쉼 the 쉼 basin, 쉼 a 쉼 basin 쉼 approximately 쉼 3 쉼 miles 쉼 to 쉼 David 쉼 then 쉼 approximately 쉼 13 쉼 miles 쉼 before 쉼 reaching 쉼 the 쉼 creek

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- 2) even if a connection between the regional aquifer and Davidson models show that at the confluence of the Davidson and 150 years, and only for a very short period of time.
- 3) such small levels “are beyond the reasonable practicability and are not suggestive of likely changes” in the reduction of surface flow “even assuming that the springs and underflow in Davidson Ca regional aquifer.”

On page 46, the following uncertainties associated with the groundwater

“The models used to evaluate the potential impacts have been developed and must be considered when interpreting the results. While the groundwater drawdown to thousands of feet is a meaningful, the models were designed for a purpose of groundwater to the general drawdown that would occur in the aquifer; however, the farther the prediction from the mine farther out in time the predictions occur, the less certain modeling experts contracted by the [Forest Service] determined the certainty to the groundwater is. The 5 to 10 foot drawdown contour, the groundwater models would be able to reasonably and streams. The low flow changes threshold are beyond the capabilities to accurately predict.”

Further, on page 48, the following discussion regarding temporal and dis

“[A] common opinion among the scientific community is that groundwater models do not have the capability to predict the timing and magnitude of groundwater changes... at remote periods in the future (hundreds of years).”

The studies and conclusions presented in the three different groundwater of which were subjected to peer review are the best scientific available. The assumptions and the no scientific basis for the surface flow in Davidson Canyon and the Cienega headwaters to changes in groundwater inches, the applicability of even the best available modeling with about probable impacts. The statements are not supported by the thorough technical analysis that the project requires. They are simply speculation.

Reductions in Surface Water Flow Downstream of the Mine

The PA evaluation rates the reduction of Rosemont as a reduction in the at the confluence of Cienega Creek and Davidson Ca. The fact that the reduction “a signal that impacts [to] surface water flows are at this confluence” into the lower reaches of Cienega Creek, and are given the cumulative effects of predicted reduction in groundwater.

Again, this is simply the best available scientific study and analysis. The FEIS contains an potential impact reduction in the surface flows in perennial streams including Cienega and the principal

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contributor to perennial stream surface pressure of water sources, the FEIS flags the same uncertainty associated with respect to perennial water connection with the discussion of Page 525 that:

“While the analysis of reduced flow predicts from relatively small amounts of water drawn off a foot, occurring decades, hundreds, or even a thousand years in the are beyond the ability of these groundwater models, or any predict... the intermittent and ephemeral the detailed predictions [provided meant to inform the decision on what happens when the model predictions were to occur as modeled; however, this does not

In addition, Page 525 FEIS that “[t]here are other trends and in the watershed that add to the uncertainty of predicting impacts operations. Other words, whatever the model, the operational only one of several contributing factors.

Against that background, the physical scenarios the lowest estimates of drawdown” produced by the models “would change Cheraga Coriel “even to 1,000 years after closure,” and that “the highest estimate the perennial nature of the stream up through 50 years after become intermittent 50 after closure and would become ephemeral 1, closure.” FEIS, Table 5.39 may tempt EPA base priority use and the worst longest time period years on the future of these hardly legitimate basis on which to challenge the thorough analysis performed during the

It is important when discussing possible impacts to Lower Davidson the physical setting in the area and located approximately 13 miles the Project. Modeled flow reduction from 14.4 ri from the project above the Davidson Canyon with Cienega Creek estimated to be 15.3 square miles of drainage while the entire Cienega Creek drainage is approximately 7.2 square miles through the Drainage Expansion 1.5 of the area of the Dam. Some of these are shown that the change in flows is indiscernible from background flow in Cienega Creek. As asserted by EPA it is likely to extend some distance beyond the confluence of Davidson Creek and Cienega Creek” data is supported by contradicted by flow modeling, numerous investigations provided by Rosemont permit and comment analysis is presented in page 355.

In fact, the FEIS goes on to discuss the potential reductions in flow and the reality, flows from the project site would need to flow in an ephemeral stream channel (these are the pockets of highly transmissive those flows would contribute to recharge to lower Davidson Canyon from tributaries, although large flow events, contribution from Barr would occur. (p. 355)

Lost Functions to Waters Upstream of Mine

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The EPA evaluation claims that there will be “secondary impacts to drainage that include severing of connectivity, decreasing quality of wildlife fragmentation of animal movement corridors,” and that these impacts are quantified and ultimately EPA will be able to quantify the impacts. EPA also claims that the agency’s project is inside the ephemeral washes that exist above the operations site. EPA claims that the ephemeral washes are direct impacts of the EPA evaluation. EPA overlooks that the ephemeral washes are already present and have been quantified and included in the 404 permit. EPA also claims that the direct impacts of the Moreover, preferred alternative for the project will result in EPA the alternatives analysis included consideration of environmentally Damaging Practical Alternative (EDPA) which is a less process criteria were chosen to insure that as many upstream Mitigation Measures as possible remain open, connected, flowing and that the impacts to any particular minimized. 켄

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ROSEMONT’S MITIGATION PROPOSAL WILL, WHEN FINALIZED, COMPENSATE FOR ALL UNAVOIDABLE IMPACTS TO WATERS OF THE UNITED STATES FROM ROSEMONT’S PROPOSED DISCHARGE

Rosemont’s mitigation proposal

Rosemont is proposing three projects to compensate for its unavoidable proposed discharge

- A potential fee (ILF) project at Pantano Dam, an available in-holding in the Cienega Creek Natural Dam Reserve created on, as accompanying 17-acre per annum (AFA) of senior surface water associated with the parcel.
- A permit responsible for the ILF project to create a new branch which comes with its own 590-acre AFA surface water right and enhancement.
- Conservation parcels within the Davidson Canyon watershed and its two tributaries (Mulberry and Barrel) the “Davidson Canyon parcels”

The projects are part of a package of mitigation with the Mine plan of (MPO) as these mitigation measures appear in the This broader package efforts to minimize and offset impacts to a for example, endangered species habitat

In selecting the proposed 404 Rosemont had projects be cognizant of the mitigation approaches preferred by the mitigation (b2) ILF project and/or (3) Permittee response. Even though there are no current mitigation approved banks available to Rosemont, the next approach of ILF ILF sponsoring entities and Corps staff have been working to develop mitigation. However, at this juncture there is not an approved ILF

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In the event the Pantano Dam ILF project will not fully mitigate the Rosemont Project, SCR offers considerable mitigation opportunities, neither project or as another ILF and project. The size of preservation parcel would provide substantial ecological benefit in the Davidson Canyon parcels are also reserve if needed.

Despite EPA assertions that these adjuvants are valuable, Rosemont believes these parcels are not properly defined, designed, developed, unique and valuable mitigation opportunities for Clean Water Act purposes are not to mine operations and represent the best mitigation of

Sufficiency of mitigation offered.

After having applied the Corps' South Pacific Division (SPD) standard Rosemont believes that Pantano Dam is not an undisturbed area or without the upper Davidson Canyon parcels sufficient mitigation on SPD developed the SOPs a regional, standardized process to determine compensatory mitigation rules (33 CFR Part 332). This was done in response to mitigation across Corps districts and project standards. Regulatory N Program Standard Operating Procedure for Determination of Mitigation Rat December 19, 2012 followed by subsequent updates and modifications procedures in the project managers to complete steps 2 and 10. The SPD Mitigation Ratio Setting Checklist (Checklist), which compares elements proposed mitigation plan (e.g., erosion, water risk, temporal loss, etc.) to the impacts, producing a final mitigation ratio for each proposed mitigation

The initial step of the Checklist is to establish a baseline ratio comparison between the aquatic functions and values present at the SPD does not currently provide quantitative functional assessment available for Arizona for general washes, so assessment is required.

Per Corps direction, Rosemont utilized the Rapid Stream Riparian Appraisal the functions of the project sites to inform the established ratios for the site. The SRSA model had been developed for wetter Rosemont Project proposed mitigation sites. Substantial modifications were made to the model for ephemeral systems.

To Rosemont and the related primary mitigation ratios of Rosemont's proposed mitigation package (Sonoita Creek Ranch and Davidson understand the Corps and the ILF sponsor are completing an assessment associated with the Pantano Dam project

In making their ratio determination, the Corps was informed by the assessment as well as the SPA maximums. For SPD Mitigation Ratio Settlement which provided examples of completed Checklists very similar to portion mitigation package permit responsible mitigation activities by the project. 4:1 to 6.1:1 for preservation of wetlands and waters of the upland buffer at the mitigation parcels. The Corps also from 6.2:1 on a project level. Sonoita Creek Ranch for establishment of habitat.

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The statements of the agency requirements, and the Project without the Opinion of conservation documents and discuss

Rosemont with context regarding the proximity schedule

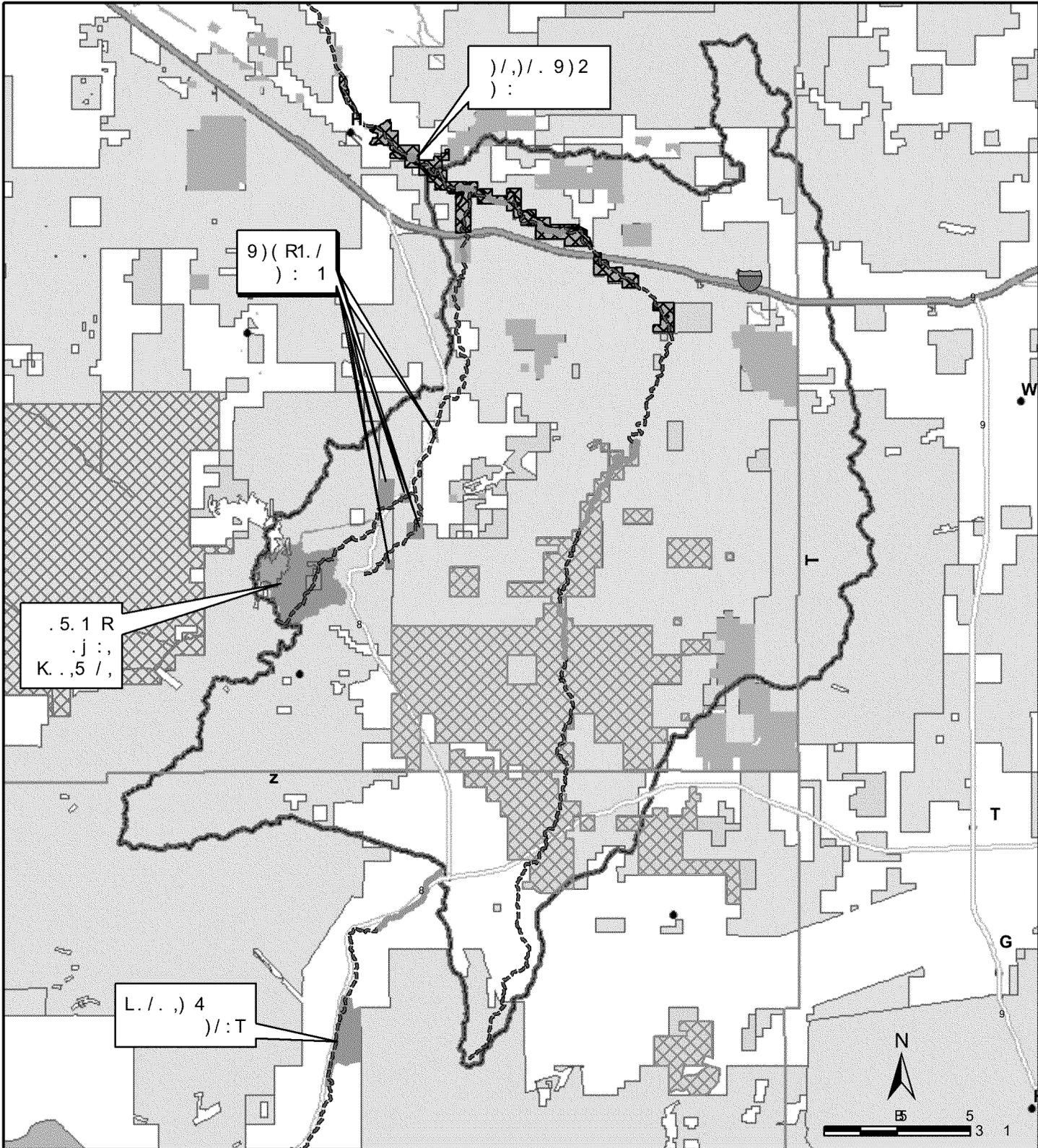
Regards,
Katherine

Vice-President, Environmental and Regulatory Affairs

Attachment: Surface Management

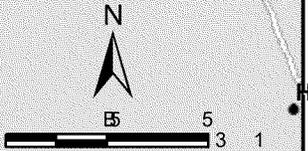
- cc: Marjorie Blaine, U.S. Army Corps of Engineers, Jared Sheffield, U.S. EPA Region IX, Jim Upchurch, U.S. Forest Service, Henry Darwin, Arizona Department of Environmental Quality, Mike Fulton, Arizona Department of Environmental Quality, David Baker, Bureau of Land Management, Steven Spangle, U.S. Fish and Wildlife Service

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